

Amendment under 37 C.F.R. § 1.111
Application No. 10/800,630
Attorney Docket No. 042236

REMARKS

Allowable Claim

Applicants gratefully acknowledge that claim 23 was merely objected to as depending from a rejected base claim, but are otherwise allowable.

Rejections under 35 USC §102(b)

Claims 5, 9, 12-19, 24 and 25 were rejected under 35 USC §102(b) as being anticipated by Japanese Publication No. 2001-015237 (JP 2001-015237).

The Examiner alleged as follows:

Regarding Claim 5, JP 2001-015237 discloses in Figs. 2 and 8 a semiconductor device protection cover attached to a semiconductor device, comprising:

- a base portion;
- a first surface, said first surface being flat (Fig. 8);
- a second surface having a projecting portion to be brought into contact with a substrate 2A of the semiconductor device and a depressed portion not to be brought into contact with parts mounted in the semiconductor device; and
- an engaging portion to engage the semiconductor device protection cover with the semiconductor device, so as to detachably attach the semiconductor device protection cover to the semiconductor device (see Fig. 2, English Abstract).

JP 2001-015237 discloses a common semiconductor socket which has a housing 2A for housing an integrated circuit 1 and a cover 2B for fixing the integrated circuit 1. The cover 2B is fixed onto the housing 2A.

Assuming that upper surface of the cover 2B in JP 2001-015237 corresponds to the “first surface” of claim 5, the Examiner alleges that the “second surface” has a projecting portion to be brought into contact with a substrate 2A of the semiconductor device. However, **reference numeral 2A is a housing of the socket** but not the substrate of the semiconductor device.

In claim 5, the term substrate of the semiconductor device is used to indicate the body of the semiconductor device 11 or interposer 13 in the specification and drawings, but the term is never used meaning a portion of a socket or anything else outside of the semiconductor device.

Therefore, assuming that the cover 2B corresponds to the semiconductor device protection cover of the present invention, the projecting portion of the second surface is brought into contact with the housing 2A of the socket but NOT with a substrate of the semiconductor device.

Moreover, the engaging portion of the cover 2B engages the cover with the housing 2A of the socket but NOT with the semiconductor device.

Thus, JP 2001-015237 does not teach or suggest “a second surface having a projecting portion to be brought into contact with a substrate of the semiconductor device and a depressed portion not to be brought into contact with parts mounted in the semiconductor device” and “an engaging portion to engage the semiconductor device protection cover with the semiconductor device, so as to detachably attach the semiconductor device protection cover to the semiconductor device.”

Claim 13 similarly recites “a **second surface to be brought into contact with a substrate** of and parts mounted in the semiconductor device, said second surface being formed

from an elastic material, wherein the semiconductor device protection cover has a structure to **engage with the semiconductor device** so as to be detachably attached to the semiconductor device.”

Claim 14 similarly recites “**a second surface having a projecting portion to be brought into contact with a substrate** of the semiconductor device and a depressed portion not to be brought into contact with parts mounted in the semiconductor device, wherein the semiconductor device protection cover has a structure to **engage with the semiconductor device** so as to be detachably attached to the semiconductor device.”

According to the present invention, the protection member can be temporarily attached during an electric performance test, and can be removed after the test without using adhesive or other additional materials. Moreover, the upper surface of the protection member is a uniformly flat surface having a specified height, and this facilitates application of a desired load. Furthermore, with the height being set to be the same with packages of other products, it is possible to make different devices have compatible size. By providing an engagement member, attachment and detachment can be done easily with precise positioning.

Due to the above features, the present invention has the following additional advantages: (1) the height of the cover can be adjusted, and stable electrical connection can be realized; (2) a die mounted on the semiconductor package can be protected while being exposed.

For at least these reasons, claims 5, 13 and 14 patentably distinguish over JP 2001-015237. Claims 9 and 12 depending from claim 5, and claims 15-19, 24 and 25 depending from claim 14 also patentably distinguish over JP 2001-015237 for at least the same reasons.

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Rejections under 35 USC §103(a)

Claims 7, 8 10 and 20 were rejected under 35 USC §103(a) as being obvious over JP 2001-015237.

As discussed above, claims 5 and claim 14 patentably distinguish over JP 2001-015237. The disclosures of JP 2001-015237 further referred to in this rejection do not remedy the deficiencies of the disclosure of JP 2001-015237 discussed above.

For at least these reasons, claims 7, 8 and 10 depending from claim 5 and claim 20 indirectly depending from 14, also patentably distinguish over JP 2001-015237.

In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

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If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,
WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP

A handwritten signature in black ink, appearing to read "Sadao Kinashi", with a stylized flourish at the end.

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